9511

Diag. Cht. No. 1258

NOAA FORM 76-35A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

DESCRIPTIVE REPORT
(HYDROGRAPHIC)

Type of Survey HYDROGRAPHIC

Field No. AHP-40-1-75

Office No. H-9511

LOCALITY

State FLORIDA

General Locality WEST COAST

Locality NORTHWEST OF TARPON SPRINGS

1975

CHIEF OF PARTY
John O. Rolland

LIBRARY & ARCHIVES

DATE Aug. 8, 1977

☆ U.S. GOV. PRINTING OFFICE: 1975—668-353

9511

Area H
Chart
1115
1255

NOAA FORM 77-28 (11-72)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

REGISTER NO.

HYDROGRAPHIC TITLE SHEET

H-9511

INSTRUCTIONS - The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

FIELD NO.

AHP-40-1-75

State Florida

General locality West Coast

Locality Northwest of ~~Clearwater~~ Tarpon Springs

Scale 1:40,000 Date of survey Apr 17 to Nov 5, 1975

Instructions dated August 20, 1974 Project No. OPR-508-AHP-75

Vessel NOAA Launches 1257 & 1255

Chief of party LCDR John O. Rolland

Surveyed by LCDR David M. Wilson, LT Richard Floyd, LTJG Craig P. Berg, ENS Susan Ellis

Soundings taken by echo sounder, hand lead, pole

Graphic record scaled by Digital Fathometer

Graphic record checked by DMW, RPF, CPB, SRE, GSL, DVM, ELM

Protracted by NA Automated plot by Calcomp - 618 COMPLOT

Verification by AMC R. Hill

Soundings in fathoms feet at MLW MLLW

REMARKS:

(1)

2

NOAA FORM 77-28 SUPERSEDES FORM C&GS-537.

☆ U.S. G.P.O. 1972-769-565/519 REG.#6

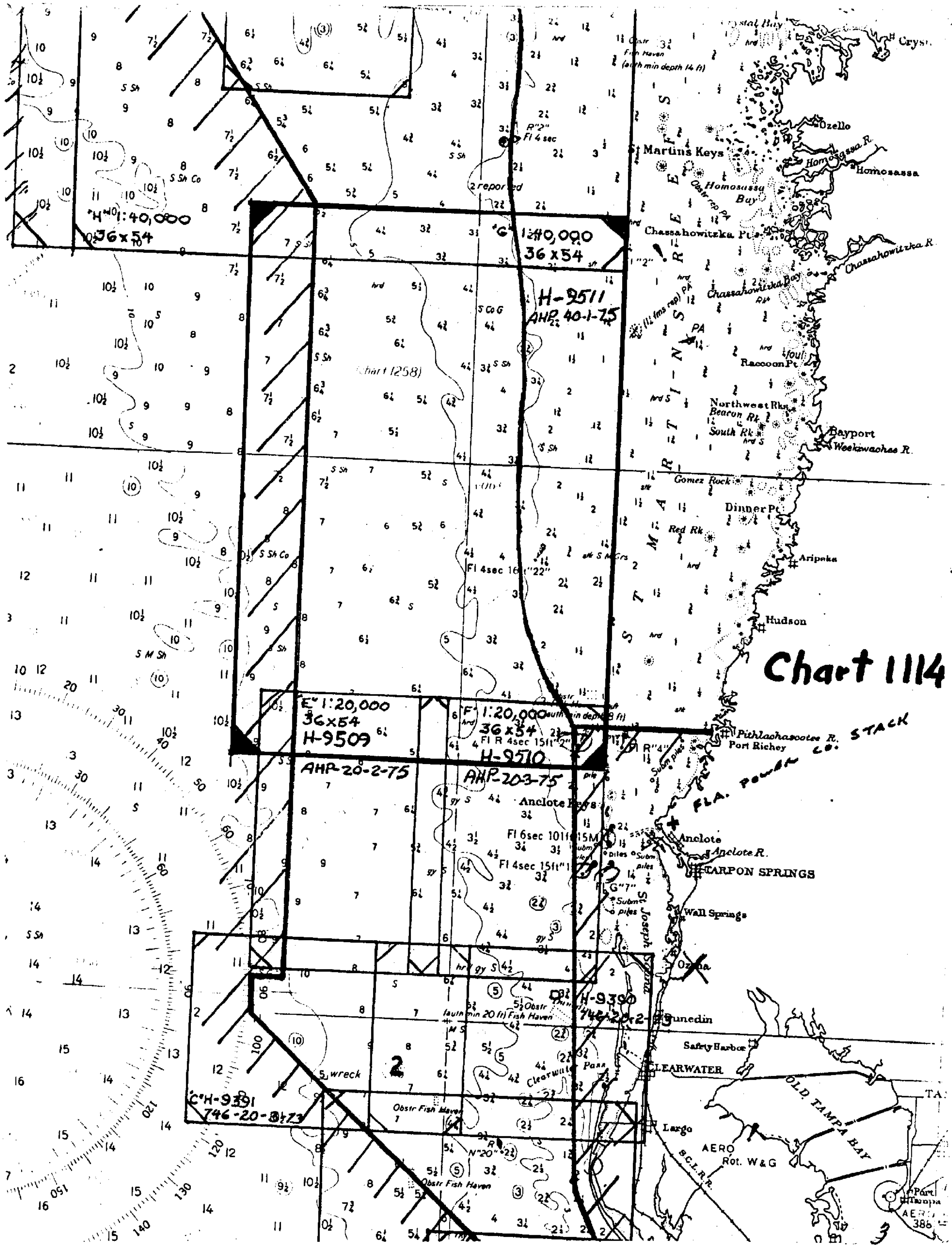


Chart 1114
"H" 1:40,000
36x54
"G" 1:40,000
36 x 54
H-9511
AHP 40-1-75
"E" 1:20,000
36x54
H-9509
AHP-20-2-75
"F" 1:20,000
36x54
H-9510
AHP-20-3-75
H-9390
746-20-2-73
"C" H-9391
746-20-3-73
FLA. POWER CO. STACK
Martins Keys
Homosassa Bay
Homosassa
Ozello
Chassahowitzka Pt.
Chassahowitzka Bay
Raccoon Pt.
Northwest Rks.
South Rk.
Bayport
Weekiwachee R.
Gomez Rock
Dinner Pt.
Aripeka
Hudson
Pithlachascotee R.
Port Richey
Anclote Keys
Anclote
Anclote R.
TARPON SPRINGS
Wall Springs
Dunedin
Safety Harbor
CLEARWATER
Largo
OLD TAMPA BAY
AERO
Rot. W & G
Port Tampa
Fish Haven
Obstr Fish Haven
wreck
Chart 1258

DESCRIPTIVE REPORT

TO ACCOMPANY

HYDROGRAPHIC SURVEY H-9511 (AHP-40-1-75)

SCALE: 1:40,000 1975
VESSEL: Atlantic Hydrographic Party Chief of Party John O. Rolland

A. Project

This project was accomplished under the following Project Instructions:

OPR-508-AHP-74, Northwest Coast of Florida, dated 20 Aug 74
Change #1: Amendment to Instructions, dated 14 Apr 75

B. Area Surveyed

The area encompassed by the survey was offshore from Tarpon Springs, Florida. The following limits form the survey boundary:

South Lat.	28°15'00"
North Lat.	28°42'00"
West Long.	83°12'00"
East Long.	82°53'00"

The survey was accomplished between 17 Apr 75 and 5 Nov 75.

C. Sounding Vessel

All sounding on this survey was accomplished by NOAA Launch 1257(EDP 1257) and NOAA Launch 1255(EDP 1255), all survey records are annotated with vessel numbers. In addition, NOAA 1257 has labels in black, NOAA 1255 is blue.

D. Sounding Equipment and Corrections to Echo Soundings

NOAA 1257 used the following equipment for all soundings obtained during this survey:

Raytheon Fathometer, Model DE-723, unit 723-4, s/n 37024
Raytheon Digital Depth Monitor, Model DE-723-41, unit DE 723, s/n 2772
Raytheon Electronic Cabinet Unit, Model DE-723-42, unit DE 723, s/n 1910

NOAA 1255 used the following equipment for all soundings obtained during this survey:

Raytheon Fathometer, Model DE-723, unit 723-40, s/n 2924
Raytheon Digital Depth Monitor, Model DE-723-D, unit 723-41, s/n 1045
Raytheon Electronic Cabinet Unit, Model DE-723-D, unit 723-42, s/n 2781

All soundings after 151312Z Day 142 used Raytheon ECU, Model DE-723D, unit 7273, s/n 2132.

NOAA 1255 had the Electronic Cabinet unit fail on Day 142. The problem was corrected by replacement.

Depths on this survey range from 10 to 66 feet.

No STD measurements were taken and, therefore, the velocity corrections applied are those determined by direct comparison. One TDC observation is included in the appendix. Approximate velocity corrections were applied to smooth plot sheets using data obtained in previous surveys, and are included in the appendix. Velocity corrections determined from direct comparison bar checks from this survey are included in the appendix.

After completion of the survey the bar check markings were measured with a steel tape and found to be in error. This error varied linearly along the entire length of both lines. On one line the 70 foot mark was actually 69.3' and on the other, the 75 foot mark was actually 74.0'. The errors were averaged and prorated for every 5 foot interval of the bar depth. Velocity corrections were determined with the corrected, or actual bar depths. An abstract of bar depths is located in the appendix.

The fathometer initial was maintained at zero by periodic adjustments and A-F checks were made throughout each day to correct stylus error.

Settlement and squat was determined for NOAA 1255 on 16 Jan 75 using the standard rod and level method. Results are included in the appendix On Launch 1257, previously determined settlement and squat corrections were used. (See H-9344 descriptive report) These corrections were combined with the transducer draft (2.7 feet) and applied to soundings via the corrector tape. On Launch 1255 however, the transducer draft (also 2.7 feet) has been applied to the corrector tapes, and settlement and squat to the TC/TI tape.

Abstracts of corrections to Echo Soundings are included in the appendix of this report.

E. Hydrographic Sheets

The field sheets were prepared aboard the survey vessels using the Hydroplot system. Verification and smooth plotting will be performed at the Atlantic Marine Center, Norfolk, Virginia. Projection and electronic control parameters are included in the appendix of this report.

F. Control Stations

Left (red) station: H-AMC-75, 1975
Right (~~green~~) station: Church, 1975

Station location was accomplished using third-order methods by Mr. Jim Shea of Operations Division, Atlantic Marine Center, Norfolk, Virginia.

G. Hydrographic Position Control

Control used for this survey was the Hastings Raydist DR-S system operating in Range-Range mode. No known difficulties were experienced with the control system that may have degraded the expected position accuracy, except as noted in the miscellaneous section of this report.

Left Station:	H-AMC-75, 1975	Red Raydist Model AA-60	s/n 54
Right Station:	Church, 1975	Green Raydist Model AA-60	s/n 119

Equipment aboard NOAA Launch 1257:

Antenna Loading Unit, Model QB-52B, s/n 143
DR-S System Navigator, Model ZA-67B, s/n 67
Transmitter, Model TA-96B, s/n 86

Equipment aboard NOAA Launch 1255:

Antenna Loading Unit, Model QB-52B, s/n 119
DR-S System Navigator, Model ZA-67A, s/n 58
Transmitter, Model TA-96, s/n 45
Strip Chart Recorder, Model RB-15, s/n 13

Calibration of the Raydist system was accomplished by means of 3-point sextant fixes with at least one object changed during each series of calibrations. On days of poor visibility, calibration was accomplished at fixed aids to navigation, located using third order methods by Mr. Jim Shea. Calibration objects were existing triangulation or located by Mr. Jim Shea. NAD 1927 was used for all position computations.

These calibrations are considered adequate for raw position data throughout the survey area. An abstract of corrections to be applied to the observed data is included in the appendix.

H. Shoreline

There was no shoreline delineated on this survey.

6

I. Crosslines

Crosslines were run to the extent of 8.4% of the basic system of sounding lines. Agreement was excellent, 0 to 2 feet in most cases. In areas where disagreement by as much as two feet occurs, it can be attributed to relatively steep slopes or very irregular bottom configuration in the vicinity of the discrepancy. Visual check of the fathogram records in these areas was used to reconcile significant differences at crossings.

Crosslines on the inshore plotter sheet were run by NOAA 1255. Approximately 60% of the sounding lines in this area were run by NOAA 1257. Agreement was good, with the above exceptions also, applying in this case.

J. Junctions

H-9511 junctions with three surveys. On the south are H-9509 and H-9510. Both of these surveys were conducted concurrently with H-9511 using the same control and sounding vessels. Naturally agreement is excellent.

On the west, H-9511 junctions with H-7792, a 1:100,000 survey run in 1950. Agreement is only fair with many soundings differing by two or three feet. Most of these soundings which differ lie within a few hundred meters of soundings which do agree. However, there does not seem to be any regularity to this, so it is assumed that these differences are caused by random shifting of bottom features over the past 25 years.

One major difference was noted in comparing H-9511 with H-7792. At latitude 28°36.2'N, longitude 83°09.0'W, a 39 foot depth was obtained where a 50 foot depth is shown on the prior survey smooth sheet.
Plot present depths

K. Comparison with Prior Surveys

The survey area was previously covered by surveys H-1760 and H-1761. Both of these surveys were conducted in 1886 and consequently, sounding density is very sparse. Also, depths on NOS chart 11126 which lie within the H-9511 survey limits are representative soundings taken directly from these old surveys. For these reasons, comparison with these surveys would be of little value.

One dashed circled presurvey review depth, taken from H-1760 did not agree with depths obtained during this survey. At 28°24.3'N, 83°05.6'W a 36 foot depth was taken from the prior survey H-1760. Thirty-five to 36 foot depths were obtained during the current survey 0.2 to 0.3 mile southwest of that position, and also 0.4 mile southeast of that position, but not on the position itself. Chart present depths

Vessel # 1255

Day # 198
Pos. # 1046-1047
1076-1077

Day # 203
Pos # 1312-1313
1341-1342
1356-1356

Day # 204
Pos. # 1463-1464

7

L. Comparison with the chart

Chart 11409 a 1:80,000 chart, is the largest scale chart on which the survey lies. The area on this chart which lies within the H-9511 survey limits was compiled directly from surveys run in the 1880's. Sounding lines in these surveys were spaced roughly a mile apart and control was not very accurate, so the surveys are of very poor quality in comparison with today's standards. For this reason and possibly because of some shifting of bottom characteristics over the past 90 years, comparison of H-9511 with chart 11409, 12th edition, April 19, 1975 is very poor. Roughly half of the charted depths are within three feet of the soundings obtained during this survey but some of the others differ by amounts up to 8 feet. The entire area should be reviewed very carefully in the office and a new edition of the chart made on the basis of this survey. Least depths, most of which are not charted, are indicated on the boatsheets.

M. Adequacy of Survey

This survey is complete and adequate to supersede prior surveys for charting purposes.

N. Aids to Navigation

The following aid is listed in the Light List. However, its position is listed incorrectly and its charted position is incorrect as verified on August 14, 1975 by NOAA Launch 1257 in the course of survey operations.

The correct position for St. Martin's Outer Shoal Light 10

Lat.	28°25.8N	Day # 226
Long.	82°55.1W	Pos. # 6637

No other aids to navigation are included in the survey area.
A second light was found to be within the limits of this sheet but was not located by the hydrographer.

O. Statistics

* Anclote Anchorage North Entrance light #2
lat. 28°15' 1.4" long. 82°52'57.1" (see chart ~~11409~~ & Sig list for sig. #300)

	NOAA 1255	NOAA 1257 11409	TOTAL
Total number of positions	4457	3481	7938
Total N.M. of Hydro	2579	2354	4933
Square N.M.	205	216	421
Bottom Samples	52	18	70
N.M. sounding line	2078	2128	4206
N.M. crossline	301	114	415
N.M. development	200	112	312

P. Miscellaneous

(1) The Tarpon Springs Power Plant Stack is very prominent and visible from a substantial percentage of the area covered by this sheet. This stack should be charted immediately. Its position was determined in 1974 by Mr. Jim Shea of AMC. It is located at latitude 28°11'03.138"N, longitude 82°47'19.402"W. Previously Charted B2-11-17-77

(2) Three surveys (H-9509, H-9510, H-9511) were worked on simultaneously. Any data common to two surveys, one of which was H-9511 (e.g., calibration abstracts and Raydist strip chart records) were placed in the records with H-9511. Only on one day (day 226) was work done on both H-9509 and H-9510. The data common to both of these surveys was placed with the H-9510 records.

(3) There is an area on sheet H-9511 on either side of a line extending from 28°19.5N, 83°03.0W to 28°20.5N, 83°05.0W which could be of interest to the physical scientist, and further investigation of the area by interested parties might be warranted. The area is exceedingly flat with a very slight slope while the surrounding area is relatively rugged with depths varying 3-5 ft. See the fathogram from NOAA 1255 for day 142, position numbers 684-685 and 752-753 for a typical profile. This area is indicated on the bottom sample and development overlay.

(4) A defective card in the Hazlow navigation interface aboard NOAA 1257 caused a systematic error in Pattern I (RED STA) readings on the following days: 196, 197, 198, 199, 247 and 248.

The eight-bit in the tenths place remained on. This gave readings 0.8 high whenever 0 thru 7 was called for, and correct readings when 8 and 9 were called for.

The following table shows the results:

Called for	Displayed
.0	.8
.1	.9
.2	.0
.3	.1
.4	.2
.5	.3
.6	.4
.7	.5
.8	.8
.9	.9

In the case of .2 thru .7 (displayed as .0 thru .5), the unit digit carried over so that the error was +0.8 (not -0.2) for .0 thru .7 and 0.0 for .8 and .9.

The days and times during which this problem continued are listed below.

On everyday except 247 and 248, the calibrations also contained the error. No change to calibration values is therefore required. On day 247 and day 248, the problem started just after the morning calibration. These calibration values should be changed by -0.8 during times of bad data. No alterations or corrections to field data have been made to reflect this situation on field smooth plot sheets, with the only exception being day 247.

On 247 day, party personnel scaled values due to bad data occurring intermittently. Other days where the problem occurred are assumed to have all bad data or all good data. Only junction areas were scaled to determine the breakpoint; the others were not.

Day	Problem	Time
196	consistent	all day
197	consistent	all day
198	consistent	all day
199	consistent	thru 152207
	good data	152207 - 165858
202-246	good data	all day
247	consistent	thru 123654
	intermittent	thereafter
248	consistent	all day
	interface replaced	

Two methods to follow for correcting the data during smooth plotting:

(1) Plot all positions where 0.8 or 0.9 occur by time and course. The disadvantage here is that difficult steering caused by seas and the jumping left-right indicator has produced wavy lines which may be incorrectly straightened out.

(2) Compare all Pattern I values which contain 0.8 or 0.9 in the tenths place with the saw tooth record.

[NOTE: Fix marking pen on saw tooth recorder is 2 to 4 mm longer than red recording pen. Hence, compensation must be made when scaling values from saw tooth records.]

Method (1) will be implemented thru a modification to the spooling ppogram by AMC Electronic Data Processing Branch CAM 33. All fix data containing .8 & .9 in pattern I will be plotted on time & course.

On J.D. 259- Launch 1257 - positions 7710-7754, soundings on field sheet are 3 ft. too deep because of error in predicted tide tape.

Q. Recommendations

None

R. Automated Data Processing

Program #	Program Name	Version Date
RK111	Realtime R/R	8/7/74
RK201	Grid, Lattice, Signal Plot	4/18/75
RK211	Non Realtime R/R	8/16/74
RK300	Utility Computations	5/22/75
AM500	Predicted Tide Generator	11/10/72
RK561	Geodetic Calibration	2/19/75
AM602	Elinore	5/21/75
PM360	Electronic Corrector Abstract	3/21/74

S. Reference to Report

None

Respectfully Submitted,

for LCDR David M. Wilson
OIC, Launch 1257

APPROVAL SHEET

SURVEY H-9511 (AHP-40-1-75)

The hydrographic records transmitted with this report are complete and adequate.

Robert Lewis

for John O. Rolland
LCDR, NOAA
Chief, AHP

12

SIGNAL TAPE

OPR-503-AMP-75

AMP-40-1-75

A-9511

NOAA LAUNCH 1255

001	7	23	36	12754	032	39	00230	250	0000	330652	*H Amc- 9 Raydist
002	7	23	04	03375	032	46	03139	250	0000	330652	*Church Raydist
110	7	23	16	06176	032	50	41492	139	0000	000000	Anclote Keys L.H.
139	7	23	01	19537	032	46	34577	139	0000	000000	Dunedin Mun San Chris St Tk, 1973
140	7	23	01	13706	032	47	10574	139	0000	000000	Dunedin H.P. Hood Inc. Tank, 1973
141	7	23	01	17535	032	47	10621	139	0000	000000	Dunedin HP. Hood Inc. Stack, 1973
150	7	27	59	03151	032	49	38495	139	0000	000000	Clearwater Bch, Pinellas Co Tk, 1973
160	7	27	55	00595	032	50	29554	139	0000	000000	Belleair Bch, Pinellas Co Tk, 1973
200	7	23	11	03133	032	47	19402	139	0000	000000	Tarpon Springs Power Plant Stack
308	7	23	15	01397	032	52	57140	252	0000	000000	Day Beacon #2
310	7	23	08	15136	032	51	59466	252	0000	000000	Day Beacon #1

001-002 Traverse (Shea)
110-160 Published Triangulation
200 Traverse (Shea)
300-310 Three Point Fix (Floyd, Shea)

* Frequency for VESNO 1257 = 3306.40
* Frequency for VESNO 1255 = 3306.52

Velocity Table
OPR-508
H-9511 (AHP-40-1-75)

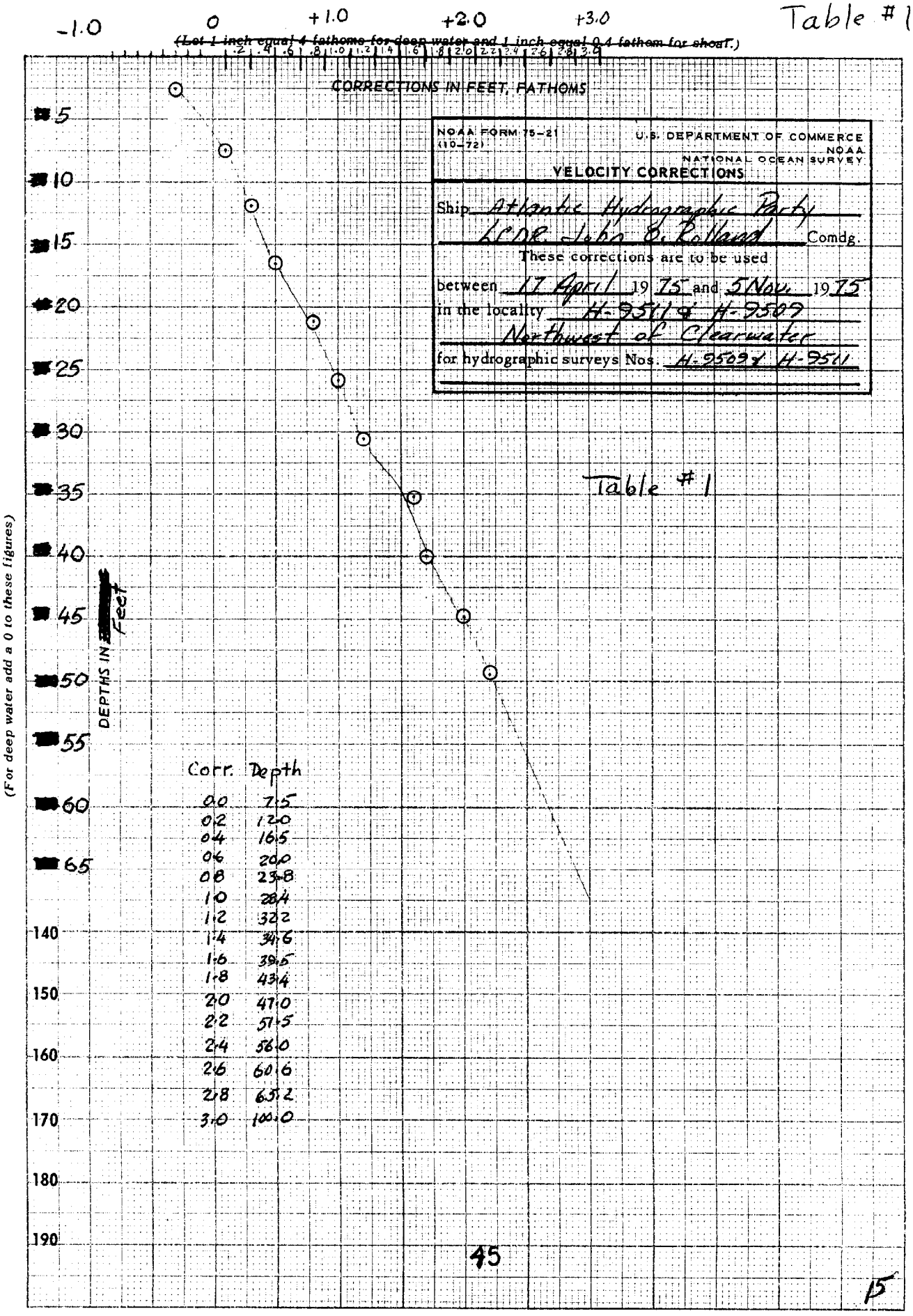
Launch 1255 & 1257

Velocity
Table #1
Covers all days

```
000075 0 0000 0001 000 125700 009511
000120 0 0002
000165 0 0004
000200 0 0006
000238 0 0008
000284 0 0010
000322 0 0012
000346 0 0014
000395 0 0016
000434 0 0018
000470 0 0020
000515 0 0022
000560 0 0024
000606 0 0026
000652 0 0028
001000 0 0030
999999 0 0030
```


14

Table #1



NOAA FORM 75-21 (10-72) U.S. DEPARTMENT OF COMMERCE NOAA NATIONAL OCEAN SURVEY

VELOCITY CORRECTIONS

Ship Atlantic Hydrographic Party by LCDR John B. Ellard Comdg.

These corrections are to be used between 17 April 1975 and 5 Nov. 1975 in the locality H-9511 & H-9509 Northwest of Clearwater for hydrographic surveys Nos. H-9509 & H-9511

Table #1

Corr.	Depth
0.0	7.5
0.2	12.0
0.4	16.5
0.6	20.0
0.8	23.8
1.0	28.4
1.2	32.2
1.4	34.6
1.6	39.5
1.8	43.4
2.0	47.0
2.2	51.5
2.4	56.0
2.6	60.6
2.8	65.2
3.0	100.0

15

ABSTRACT OF BAR DEPTH CORRECTIONS

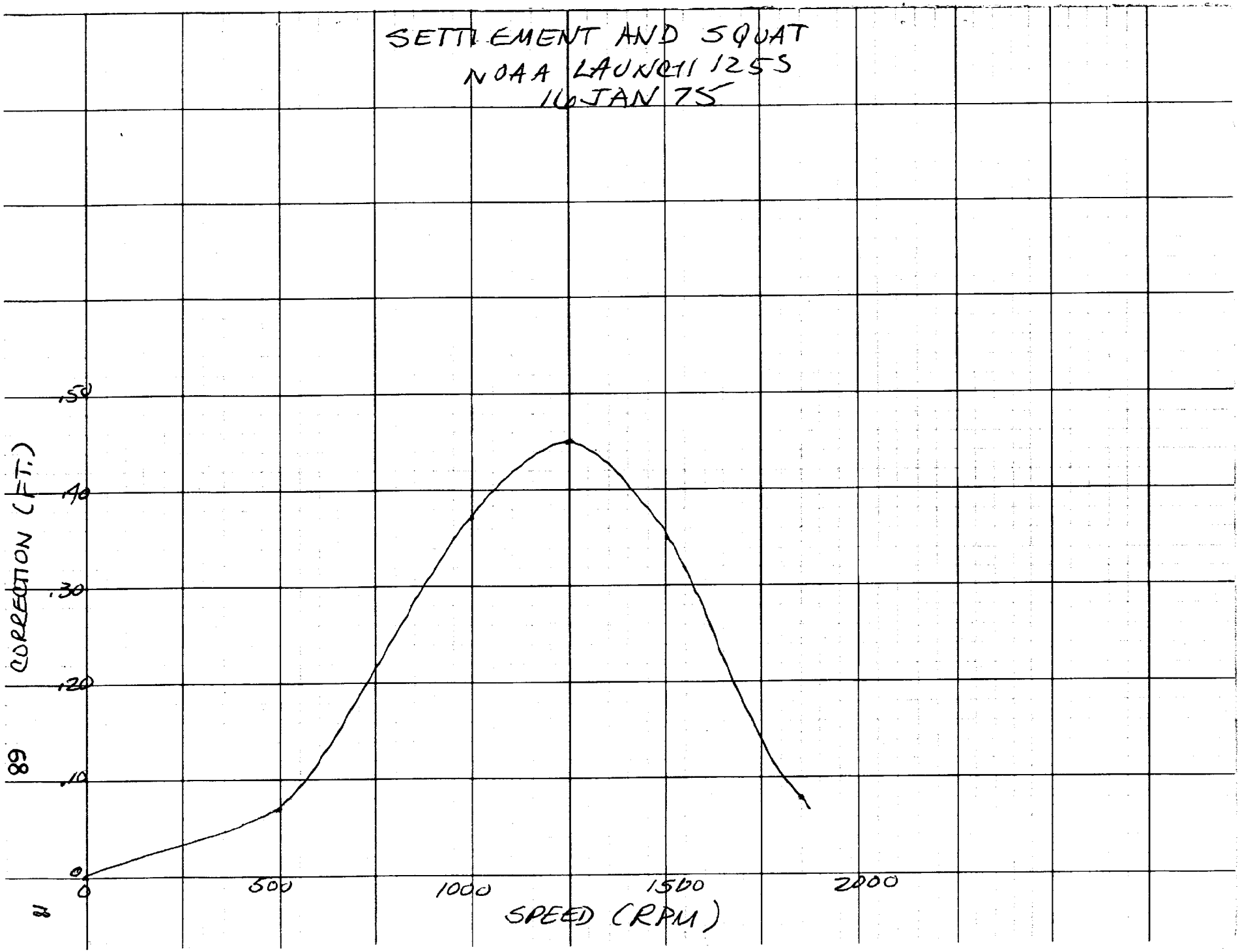
Depth of Bar Marking		Actual Depth
Right Side	70'	69.3'
Left Side	75'	74.0'

PRORATED VALUES

Depth of Bar Marking(ft)	Actual Depth (ft)
5	4.94
10	9.89
15	14.83
20	19.77
25	24.72
30	29.66
35	34.60
40	39.54
45	44.49
50	49.43
55	54.37
60	59.32
65	64.26
70	69.20

Settlement and Squat Determination
NOAA Launch 1255
16 January 1975
Egmont Key, Florida

	RPM's	Stop	Out	Back	Stop	Average Stop	Average At Speed	Settlement & Squat
(Idle)	500	2.36	2.43	2.40	2.33	2.34	2.41	+0.07
	1000	2.33	2.68	2.70	2.32	2.32	2.69	+0.37
	1250	2.32	2.76	2.74	2.27	2.30	2.75	+0.45
	1500	2.27	2.60	2.64	2.28	2.27	2.62	+0.35
(Full)	1850	2.27	2.33	2.35	2.26	2.26	2.34	+0.08


SETTLEMENT AND SQUAT
NOAA LAUNCH 1255
16 JAN 75
.50
.40
.30
.20
.10
0
CORRECTION (FT.)
0
500
1000
1500
2000
SPEED (RPM)

SETTLEMENT AND SQUAT CORRECTION

Launch 1257

TIME	REM'S	PASS#1	PASS#2	PASS#3	MEAN	TIDE CORRECTION	NEW MEAN	SETTLEMENT &SQUAT CORRECTION
9:35	stop	8.68	8.60	8.69	8.68	0	8.68	.00
	600	8.70	8.75	-	8.72	-.01	8.71	+.03
9:50	1100	9.15	9.14	9.05	9.11	-.023	9.09	+.41
	1850	8.40	8.50	-	8.45	-.04	8.40	-.28
10:15	stop	8.74	8.73	-	8.74	-.06		

Field Tide Note

Predicted tides were generated using program AM500 and applied to on and off line plots. Predicted highs and lows were taken from St. Marks River entrance and corrected to Anclote Keys, south end, latitude 28° 10'N, longitude 82° 51'W. For smooth plotting actual tides should be taken from St. Marks River Entrance, corrected to Anclote Keys, south end, and applied to all depths in the survey. No zoning is required.

The original requirement for a tide gage at Anclote Key was deleted with change no. 1, dated April 14, 1975.

5/18/76

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

TIDE NOTE FOR HYDROGRAPHIC SHEET

Processing Division: Atlantic Marine Center:

Hourly heights are approved for

Tide Station Used (NOAA Form 77-12): Cedar Key

Period: April 17 - November 5, 1975

HYDROGRAPHIC SHEET: H-9511

OPR: 508

Locality: Off the west coast of Florida near Anclote Key

Plane of reference (mean ~~lower~~ low water): 1.75
diurnal

Height of Mean High Water above Plane of Reference:
2.6 ft.

Remarks: Recommended zoning:

Apply a time correction of -1.9 hr. and range ratio of x0.86.

James R Hubbard
for Chief, Tides Branch

21

NOAA FORM 76-155
(11-72)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

SURVEY NUMBER

H-9511

GEOGRAPHIC NAMES

Name on Survey	A ON CHART NO.	B ON PREVIOUS SURVEY NO.	C ON U.S. QUADRANGLE MAPS	D FROM LOCAL INFORMATION	E ON LOCAL MAPS	F P.O. GUIDE OR MAP	G RAND MCNALLY ATLAS	H U.S. LIGHT LIST	K	
TARPON SPRINGS (HiHo)										1
										2
										3
										4
										5
										6
										7
										8
										9
										10
										11
										12
										13
										14
										15
										16
										17
					APPROVED					18
					Chas. E. Hemmington					19
					STAFF GEOGRAPHER - CSDR2					20
					16 Sept 1977					21
										22
										23
										24
										25

NOAA FORM 76-155 SUPERSEDES C&GS 197

☆ U.S. G.P.O. 1972-769-565/516 REG.#6

22

APPROVAL SHEET
FOR
SURVEY H-9511

A. All revisions and additions made on the smooth sheet during verification have been entered in the magnetic tape records for this survey. A new final position printout has/~~has not~~ been made. A new final sounding printout has/~~has not~~ been made.

B. The verified smooth sheet has been inspected, is complete, and meets the requirements of the Provisional Hydrographic Manual. Exceptions are listed in the Verifier's Report.

Date: July 12, 1977

Signed: William L Jones

Title: Chief, Verification Branch

NOAA FORM 77-27
(9-72)
(PRESC. BY
HYDROGRAPHIC
MANUAL 20-2,
6-94, 7-13)

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

HYDROGRAPHIC SURVEY STATISTICS
HYDROGRAPHIC SURVEY NO. H-9511

RECORDS ACCOMPANYING SURVEY: To be completed when survey is registered.

RECORD DESCRIPTION	AMOUNT	RECORD DESCRIPTION	AMOUNT
SMOOTH SHEET with pos.& excess overlays	1	BOAT SHEETS (7 parts, 5 mylar, 2 paper)	1
DESCRIPTIVE REPORT	1	OVERLAYS (preliminary) ~~(Pos. &Excess)~~	~~2~~ 5

DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/ SOURCE DOCUMENTS
~~Accordian~~ ENVELOPES	~~2~~		~~2~~			
CAHIERS	4		with depth records			
VOLUMES	2		~~1-smooth printout~~			
BOXES						

T-SHEET PRINTS *(List)*
None

SPECIAL REPORTS *(List)*

OFFICE PROCESSING ACTIVITIES
The following statistics will be submitted with the cartographer's report on the survey

PROCESSING ACTIVITY	AMOUNTS			
	PRE-VERIFICATION	VERIFICATION	REVIEW	TOTALS
POSITIONS ON SHEET				7938
POSITIONS CHECKED	800	800		
POSITIONS REVISED	10	10		
DEPTH SOUNDINGS REVISED	950	950		
DEPTH SOUNDINGS ERRONEOUSLY SPACED		0		
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED		0		
	TIME (MANHOURS)			
TOPOGRAPHIC DETAILS		0		
JUNCTIONS		14		
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS		24		
SPECIAL ADJUSTMENTS	14	30		
ALL OTHER WORK		244		
TOTALS	14	312		

	BEGINNING DATE	ENDING DATE
PRE-VERIFICATION BY R. Hill, F. Lamison	4-22-76	5-11-76
VERIFICATION BY R. Hill	8-18-76	5-18-77
REVIEW BY R.R.Hill HIT (AMC) 12 hrs	6-27-77 7-6-77	7-5-77 7-8-77 24

Quality Control: GK Myers 9-15-77 29 hrs Baumgardner 4 hrs 10/18/77

Nichols KRC

* U.S. G.P.O. 1972-769-562/439 REG.#6

Reg. No. H-9511

The Computer and Excess Sounding Cards for this survey have not been corrected to reflect the changes made to the Computer Card and Excess Card Printouts at this time of the review.

When the cards have been updated to reflect the final results of the survey the following shall be completed:

CARDS CORRECTED

DATE_____ TIME REQ'D_____ INITIALS_____

REMARKS:

Reg. No. 9511

The magnetic tape containing the data for this survey has not been corrected to reflect the changes made during evaluation and review.

When the magnetic tape has been updated to reflect the final results of the survey, the following shall be completed:

MAGNETIC TAPE CORRECTED

DATE 9-23-82 TIME REQ'D._____ INITIALS JHC

REMARKS:

H-9511

Items for Future Presurvey Reviews

No significant changes in the bottom configuration have occurred since the prior surveys.

The submerged wreck PD charted at latitude 28°27.68', longitude 83°00.04' from LNM 15/76 should be investigated by wire drag at an opportune time.

Position Index		Bottom Change Index	Use Index	Resurvey Cycle
Lat.	Long.			
281	0830	2	2	50 years
282	0830	2	2	50 years
283	0830	1	2	50 years
284	0830	1	2	50 years
281	0831	1	2	50 years
282	0831	1	2	50 years
283	0831	1	2	50 years
284	0831	1	2	50 years

ATLANTIC MARINE CENTER
VERIFIER'S REPORT

REGISTRY NO. H-9511 FIELD NO. AHP-40-1-75

Northwest of Clearwater, Florida

SURVEYED: April 17 through November 5, 1975

SCALE: 1:40,000 PROJECT NO.: OPR-508

SOUNDINGS: Raytheon DE-723 s/n 37024
Raytheon DE-723 s/n 2924
CONTROL: Raydist

Chief of Party ..... LCDR John Rolland
Surveyed by ..... LCDR David Wilson
..... LT Richard Floyd
..... LTJG Craig Berg
..... ENS Susan Ellis
Automated Plot by ..... Calcomp Plotter #618 (AMC)
Verified and Inked by ..... Robert R. Hill
June 27, 1977

Robert R. Hill

1. Introduction

No unusual problems were encountered during verification.

The projection parameters have been revised and noted in the Descriptive Report.

2. Control and Shoreline

a. The control is adequately described in Sections F and G of the Descriptive Report.

b. There is no shoreline within the limits of this survey.

3. Hydrography

a. Depths at crossings are in good agreement.

b. The standard depth curves are adequately delineated, with the inclusion of several dashed curves and brown curves.

c. The development of the bottom configuration and least depths are considered adequate.

4. Condition of Survey

The sounding records, automated plotting and the Descriptive Report are adequate and conform to the requirements of the Provisional Hydrographic Manual.

5. Junctions

An adequate junction was effected with the following contemporary surveys:

H-9583 (1975) to the north
H-9509 (1975) to the southwest

Also, to the southeast, a junction with contemporary survey H-9510 (1975) was made with the present survey. Due to the irregular bottom topography in this area and the unavailability of this contemporary survey (H-9510) for adjustments, this junction should be considered further by Quality Control.

6. Comparison with Prior Surveys

H-1760 (1886) 1:40,000
H-1761 (1886) 1:40,000
H-1770 (1887) 1:40,000
H-7792 (1948-50) 1:100,000

These surveys, taken together, cover the common area of the present survey. A comparison between the present survey and the prior surveys reveals additional bottom features which can be attributed to the more detailed present survey.

Pre-survey Review Items listed for the present survey are adequately discussed in Section K of the Descriptive Report, with the following exceptions:

(1) A dashed-circled 33 foot depth charted at latitude 28° 31' 28", longitude 83° 04' 49" and originating with prior survey H-1761 (1886), was not found at this exact position. However, shoaling is noted in this area and it is recommended that this shoal be charted.

(2) A dashed-circled 27 foot depth charted at latitude 28° 14' 55", longitude 83° 00' 14" and originating with prior survey H-1760 (1886), was found.

The present survey is adequate to supersede prior surveys within the common area.

7. Comparison with Chart 11409, 14th Edition, February 19, 1977

a. Hydrography

The charted hydrography originates with the previously discussed prior surveys which require no further consideration.

The present survey is adequate to supersede the charted hydrography in the common area.

b. Aids to Navigation

The aids to navigation on the present survey are in substantial agreement with their charted positions and adequately mark the features intended, with the exception of St. Martin's Outer Shoal Light #10. This aid is charted incorrectly and is adequately discussed in Section N of the Descriptive Report. Position of light referred to Area 4.

8. Compliance with Instructions

This survey does comply with the Project Instructions.

9. Additional Field Work

This is an excellent basic survey. Additional field work is not recommended.

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SURVEY
Atlantic Marine Center
439 West York Street
Norfolk, Virginia 23510

File No: D6-5
Ser. No: 77-69

July 11, 1977

CAM3/RAT

TO: RADM Robert C. Munson
Director, Atlantic Marine Center

FROM: CDR Robert A. Trauschke
Chief, Processing Division

SUBJECT: Hydrographic Inspection Team Report, H-9511

This survey was conducted in 1974 by the Atlantic Hydrographic Party (Launches 1255 and 1257). The work was in general compliance with Project Instructions dated August 20, 1974. The work is on the west coast of Florida. With more than 45,000 records it is the largest survey ever processed at AMC.

FIELD WORK

It would have been desirable to have altered the N-S orientation slightly so as to cross the depth curves at a greater angle. A number of developments were conducted for no apparent reason. Shoal indications at 28° 30.6' and 82° 56.5', and 28° 34.8' and 82° 55.5' were not developed.

VERIFICATION

A 1:40,000 survey run at 200 meter line spacing really makes for a congested sheet. The two shoal indications mentioned above were rescanned after HIT. Some supplemental curves were added after HIT. It is interesting to note that the excess overlay indicates that the crosslines and most developments were very slightly shoaler than the main scheme soundings. The Hydrographic Inspection Team devoted about 12 hours to this survey.

Additional Notes for H-9511

In the vicinity of latitude 28° 30' 18" and longitude 82° 56' 18", a 14 foot sounding was noted on the fathogram for day #260 (position #7577). Unfortunately, this area was not further developed by the hydrographer to delineate the maximum extent of this feature. However, it is recommended that this depth be retained for charting.

Survey H-9511
Examined and Approved:
Hydrographic Inspection Team
Date: July 8, 1977

CDR Robert A. Trauschke, NOAA
Chief, Processing Division

CDR Jeffrey G. Carlen, NOAA
Chief, Coastal Mapping Division

. Douglas Mason, LT, NOAA
Chief, EDP Branch

William L. Jonns
Chief, Verification Branch

Dorothy C. Calland
Verification Branch

Approved/Forwarded

Robert C. Munson
RADM, NOAA
Director, Atlantic Marine Center

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SURVEY
Rockville, Md. 20852

C352

September 15, 1977

TO: A. J. Patrick
Chief, Marine Surveys Division

FROM: G. K. Myers
Chief, Quality Control Branch

SUBJECT: Quality Control Report, H-9511 (1975), Florida, West Coast, Northwest of Tarpon Springs

A quality control inspection of H-9511 (1975) has been accomplished to evaluate the accuracy and adequacy of the survey with respect to data acquisition, delineation of the bottom, determination of least depths and navigation hazards, decisions and actions by the verifier, and cartographic presentation of data.

Junctions were completed with H-9509 (1975) and H-9510 (1975) on the southwest and southeast, respectively, during quality evaluation. The junction with H-9583 (1975) will be examined during quality control of that survey.

The present survey was found to conform to National Ocean Survey standards and requirements except for the following deficiencies.

1. Some erroneous soundings that were corrected by hand on the smooth sheet during verification should have been revised on the final sounding printout.

2. It was necessary for the evaluator to rescan the fathograms in some areas of irregular bottom. A few peaks at unequal intervals were added to the smooth sheet during quality control.

3. An edition of the chart printed subsequent to the date of the present survey was mistakenly used to compare present depths with charted hydrography during verification.

4. No chart mark-up copy of the area covered by the present survey was forwarded to the Quality Control Branch.

5. The submerged wreck, PD charted at latitude 28°27.45', longitude 83°00.04' from LNM 15/76 subsequent to the date of the present survey should have been noted in the Verifier's Report. This wreck should be retained on the chart.

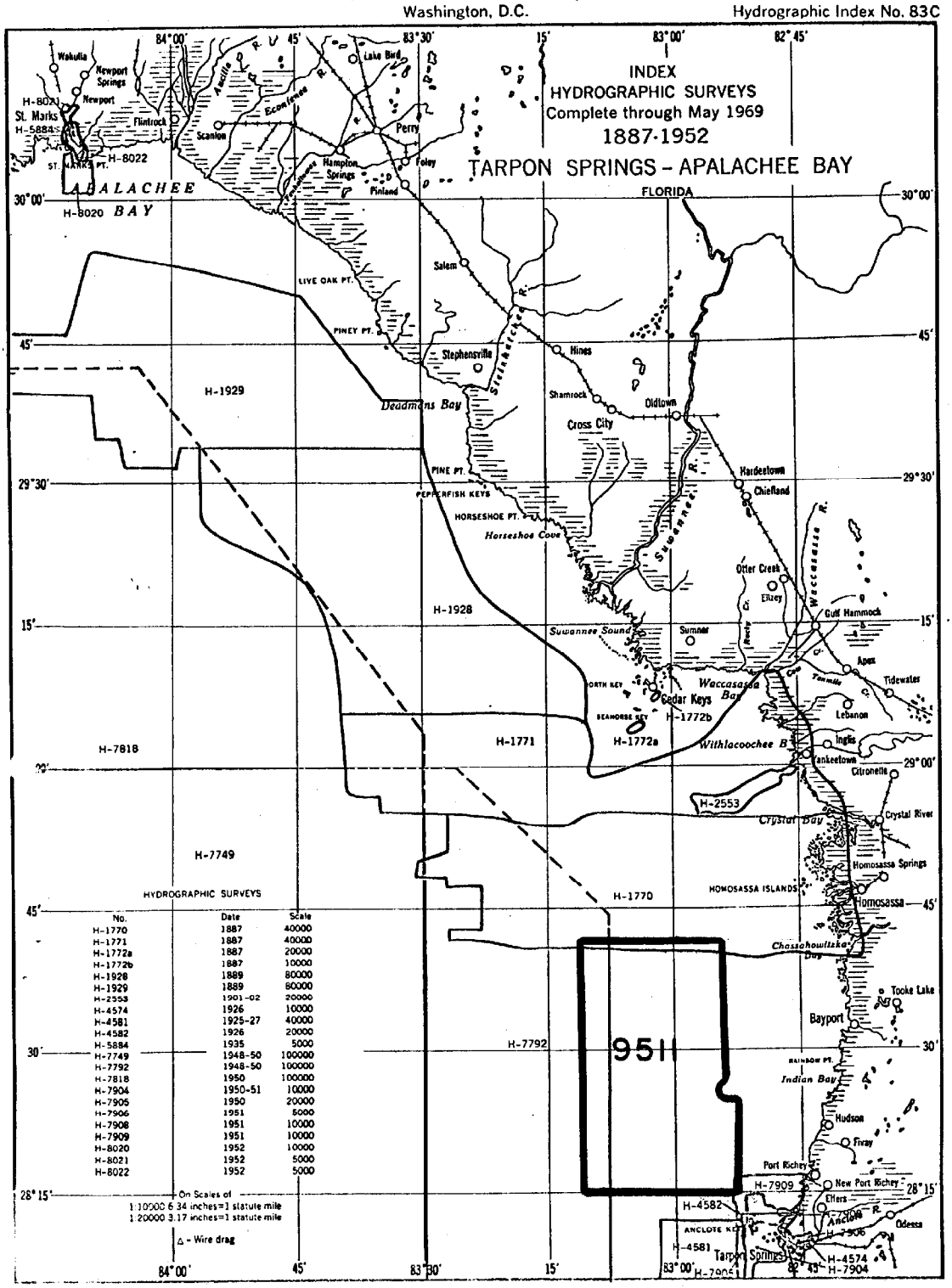
55

6. In general, a comparison of the prior and present depths in the area covered by the present survey reveals a relatively stable bottom. However, some shifting of bottom sediments is evident. Delineation of the depth curves has essentially remained the same.

cc:
C351

DEPARTMENT OF COMMERCE
Environmental Science Services Administration
U.S. Coast and Geodetic Survey
Washington, D.C.

Hydrographic Index No. 83C



HYDROGRAPHIC SURVEYS

No.	Date	Scale
H-1770	1887	40000
H-1771	1887	40000
H-1772a	1887	20000
H-1772b	1887	10000
H-1928	1889	80000
H-1929	1889	80000
H-2553	1901-02	20000
H-4574	1926	10000
H-4581	1926-27	40000
H-4582	1926	20000
H-5884	1935	5000
H-7749	1948-50	100000
H-7792	1948-50	100000
H-7818	1950	100000
H-7904	1950-51	10000
H-7905	1950	20000
H-7906	1951	5000
H-7908	1951	10000
H-7909	1951	10000
H-8020	1952	10000
H-8021	1952	5000
H-8022	1952	5000

On Scales of
1:10000 6.34 inches=1 statute mile
1:20000 3.17 inches=1 statute mile

Δ - Wire drag

35

FORM C&GS-8352
(3-25-63)

NAUTICAL CHART DIVISION

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. 9511

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
1258	11-17-77	B. Fernandez	Full ~~Part Before~~ After Verification Review Inspection Signed Via
11409			Drawing No.
11400	9-4-79	W. Williams	Full ~~Part Before~~ After Verification Review Inspection Signed Via
			Drawing No. 29
11411	3-12-81	Dick Killen	Full ~~Part Before~~ After Verification Review Inspection Signed Via
			Drawing No. 1
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
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			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.

FORM C&GS-8352 SUPERSEDES ALL EDITIONS OF FORM C&GS-975.

USCOMM-DC 8558-P63